

REMARKS

The application has been amended and is believed to be in condition for allowance.

The specification has been amended as to form to include section headings consistent with U.S. practice.

The recitations of original claim 7 have been incorporated into independent claim 1. Claims 7, 19 and 20 have been canceled.

The recitation of claim 7, namely "said fluid has a viscosity greater than 500cSt" is essential in the relevant art ("damping the vibrations of cable stays, for works such as suspension bridges", see first paragraph of the specification) to have a nearly constant damping efficiency (as per the third paragraph of specification page 7) at any ambient temperature (between -40°C and +60°C in the case of suspension bridges in northern countries).

In this regard, this feature is also essential to have devices free of maintenance, whereby no fluid should be lost over time.

The Official Action indicated that there was a typographical error in claim 9. However, see that claim 9 recites a cable, such that the recitation later in the claim of "the cable" is believed proper.

Responsive to the election of species requirement, applicant elects Species B, shown by Figure 4. All of the claims are believed to read on this species (claims 1-6, 8-18).

Claims 1-14 and 19-20 stand rejected as anticipated by any one of SALMON et al. 4,280,600; MAURICE (Belgium 458209); DACHICOURT et al. 3,970,292; and DE 2623622.

Claims 15-18 stand rejected as obvious over these same references.

Applicant has carefully studied these references and believes that they are not anticipatory and that they fail to render obvious the presently pending claims.

SALMON et al. discloses dampers for car suspensions having fluid of necessarily low viscosity. The dampers do not include "means for limiting the leakage of fluid from the main chamber toward the secondary chambers, and for facilitating it from at least one of the secondary chambers toward the main chamber". According to SALMON et al., the fluid flows in the same manner from main chamber to secondary chambers and in opposite direction. SALMON et al. do not allow isolating main chamber from secondary chambers when high forces are applied by plunger piston to the fluid in the cylinder.

MAURICE also discloses dampers for car suspensions with low viscosity fluid (page 1, line 9). In place of the simple piston and cylinder combination according to the invention, giving a same flow rate from one side to the other and

oppositely, MAURICE discloses a cylinder whose two ends are connected by two ducts 19 each allowing fluid flow in a direction only, two ducts giving different damping features and a calibrated one-way valve 13, 14 in the piston. The piston slides sealingly in the cylinder, and there is no "piston ring sliding with a slight clearance inside a main chamber provided in said cylinder".

DACHICOURT et al. relates to a suspension device of hydraulic and pneumatic kinds. The device does not include a system including two secondary chambers, each around an orifice for passage of the central rod of the piston. According to DACHICOURT et al., fluid leaking by seals 11 and 12 to the outside is lost for the system. It is compensated by the fluid reserve only for the period. Moreover, if compressed air of space 4 enters the cylinder, it gathers at the top of the fluid in the cylinder and hydraulic operation is greatly reduced.

DE 2 623 622 discloses a damper for a pendular device which measures the torque of industrial machines. The device is used with industrial machines in shop conditions, that is at normal ambient temperatures, and the problem of temperature variation is not present. Torque measuring pendular devices works at such frequencies (tens to hundreds hertz) that the fluid of the damper is necessarily of low viscosity. So, this reference does not suggest to one skilled in the art to use a

high viscosity fluid to give a regular behavior in a large range of temperature variation.

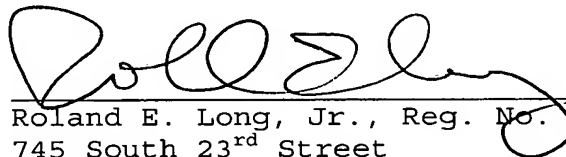
Since each of the references fails to teach at least one feature of independent claim 1, this claim is believed patentable. The dependent claims are believed patentable at least for depending from an allowable claim.

Reconsideration and allowance of all the pending claims are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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REL/mjr
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